

AMENDMENTS TO THE CLAIMS

Claims 1-5 (Canceled)

Claim 6 (New) A fuel injection method for a fuel injection system including a solenoid that is driven by a drive pulse and a resistor for detecting a current flowing through the solenoid, comprising:

pre-detecting a first current flowing through the resistor when the drive pulse is OFF;
detecting a second current flowing through the resistor when the drive pulse is ON;
calculating a difference between the first current and the second current; and
adjusting a width of the drive pulse based on the difference calculated.

Claim 7 (New) The fuel injection method according to claim 6, further comprising correcting the difference based on a predetermined correction factor, wherein
the adjusting includes adjusting the width of the drive pulse based on the difference corrected.

Claim 8 (New) The fuel injection method according to claim 6, wherein
the pre-detecting includes pre-detecting the first current every time the drive pulse is turned OFF so that the width of the drive pulse is corrected every time the drive pulse is turned ON.

Claim 9 (New) The fuel injection method according to claim 7, further comprising calculating the correction factor based on currents that are respectively detected before and after flowing a predetermined current through the solenoid.

Claim 10 (New) The fuel injection method according to claim 9, further comprising storing the correction factor calculated in a rewritable storage unit.